

WHAT IS CLAIMED IS:

1. An automated negotiation and provisioning method for broadcast or other communication or storage resources or a system incorporating such resources, in which content is admitted to the individual resources or system, and/or managed within the system via an automated negotiation and provisioning system manager (computer) that allocates resources or directs system operation, comprising the iterated steps of:

inputting into a computer the rules for admission to and/or use of the resources and/or system,

outputting from the computer a summary of the rules,

inputting into the computer offered terms for admission or use by prospective users of the resource or system,

outputting from the computer intermediate determinations and/or final binding terms for successful offers.

2. The method of claim 1, with an additional iterated step of:

outputting from the computer command signals to resource or system controllers or other system elements that reflect binding determinations from the automated negotiation and allocation process.

3. The method of claim 1, with an additional iterated step of:

inputting into the computer telemetry (or other automated or manual observations) to be used in the rules.

4. The method of claim 1, in which the resource or system of resources includes a geo-synchronous satellite.

5. The method of claim 1, in which the resource or system of resources includes a terrestrial-based wireless transport.

6. The method of claim 1, in which some of the content admitted to the system or controlled by the system is encrypted in order to permit selective access to the

content solely by one or another subset of system receivers intended to receive that content.

7. The method of claim 1, in which a parameter representing some number of  
5 real or hypothetical receivers is used in the rules.

8. The method of claim 1, in which a guide is used to simplify identification  
of content traversing the resource or system of resources, such guide providing custom-  
tailored views of content schedules or repositories permissible to be viewed by a given  
10 viewer and either communicated over the resource, system resources, or the Internet (or  
alternative dedicated or dial-up or virtual data transmission circuits).

9. The method of claim 1, in which a guide is used to communicate the status  
of the rules-based procedure including showing availability of capacity and status of  
15 resources and negotiations, such guide being communicated over the resource, system  
resources, or the Internet (or alternative dedicated or dial-up or virtual data transmission  
circuits) to system users.

10. The method of claim 1, in which the content, terms of offers, and other  
20 aspects of resource and/or system operation are categorized for rules-processing,  
allocation, control, and guide purposes according to sets of parameters associated with a  
plurality of templates, each template including a certain set of parameters.

11. The method of claim 10, in which the parameters include one or more of  
25 the following:

temporal parameters,  
start time,  
duration,  
maximum acceptable jitter,  
30 periodicity,  
number of instances,  
rate parameters,

minimum bit rate,  
maximum bit rate,  
average bit rate,  
conditional minimum bit rate,  
5 conditional maximum bit rate,  
second, or third moments of the bit rate,  
periodic first, second, or third moments of the bit rate,  
acceptable probability of rate adaptation,  
decode buffer status,  
10 volume of data,  
interest area,  
price to prospective content users or viewers, and  
other rules of access for prospective users or viewers.

15 12. The method of claim 1, in which a cache is used to selectively store  
content received over a broadcast or communication system resource.

20 13. The method of claim 12, in which the content admitted to the cache is  
decrypted (if it had been encrypted) and then re-encrypted (or encrypted for the first time)  
for controlling access of the content as it is used from the cache.

25 14. The method of claim 12, in which the cache is positioned directly  
downstream of a broadcast receiver and positioned directly downstream of the cache is a  
high-bandwidth localized computer network.

15. The method of claim 1, in which the inputting and outputting take place on  
different computers connected via a network.

30 16. The method of claim 1, in which the inputs derive from either real-time  
elections or agent-actuated elections according to preset condition-based elections.

17. The method of claim 1, in which some or all of the steps are recorded and reported to cooperative billing, conditional access, or other cooperative process or system.

5 18. The method of claim 1, in which a transaction is effected either creating automatic charges or debits to an account or initiating an instant transfer of funds.

19. A method for aggregating system users into a communications neighborhood, community, or other focal area comprising:

10 using multiple access sharing techniques (such as TDMA, SDMA, CDMA, FDMA, a combination thereof, or other multiple access technique) for sharing a communications channel;

in which the communications channel provides connectivity to a plurality of receivers, each of which may use the communications channel for internal  
15 communication, communication with partners, communication with suppliers, communication with customers, or other entity.

20. The method of claim 1, in which the rules for admission or control aim to maximize some objective, such as:

20 the unit price for some commodity measure,  
the total number of users, or  
total revenue.

21. The method of claim 1, in which the rules involve one of a number of  
25 auction structures, such as:

sealed bid auction,  
first price auction,  
discriminatory auction,  
second price auction (Vickrey auction),  
30 uniform price auction,  
open bid auction,  
English auction,

Dutch auction,  
all-pay auction, or  
common value auction.

5           22.     The method of claim 1, in which the rules involve one of a number of  
options structures.

          23.     The method of claim 1, in which the rules are specific with regard to the  
time period during which offers may be input, and the inputting of offered terms is during  
10   that time period.

          24.     The method of claim 1, in which the rules are specific with regard to the  
time period during which delivery, control, and/or storage would take place, and the  
outputted control signals correspond to that time period.

15           25.     The method of claim 1, in which the rules involve successive stages each  
involving one or more of the methods herein described, each method used either  
independently or in combination with other methods, where successive stages are begun  
or ended by rules-based determinations of the method of claim 1.

20           26.     The method of claim 1, in which subscribers, content recipients, viewers,  
other system users or prospective users provide information to the computer regarding  
changes in subscription status, election of pay-per-view event options, viewing of a given  
content segment, or other feedback or interactive message to be used in the method of  
25   claim 1, and also in associated reporting and billing processes.

          27.     The method of claim 1, in which a graphical user interface is used as the  
remote client interface for the entity (or entities) seeking to effect content delivery,  
control, or storage, where the graphical user interface is linked to the computer via the  
30   Internet or dedicated or dial-up or virtual data transmission circuits, and where the remote  
client interface is automated with a software agent acting as a proxy for the remote entity.

28. The method of claim 1, in which a contract is established between parties in advance of enactment of their respective roles for any implementation of the method of claim 1, said contract establishing the legal basis for the procedures of such an implementation of the method of claim 1.